#### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior listings of claims in the application:

#### 1. (PREVIOUSLY PRESENTED) A compound of formula 1

$$R_{5}$$
 $R_{6}$ 
 $R_{7}$ 
 $N_{1}$ 
 $R_{3}$ 

Formula 1

wherein

R<sub>3</sub> is C<sub>1</sub>-C<sub>10</sub> alkyl;

 $R_4 \text{ to } R_7 \text{ are independently selected from the group consisting of -H, C1-C10 alkoxyl, C1-C10 polyalkoxyalkyl, C1-C20 polyhydroxyalkyl, C5-C20 polyhydroxyaryl, saccharides, amino, cyano, nitro, halogen, hydrophilic peptides, arylpolysulfonates, C1-C10 alkyl, C1-C10 aryl, -SO_3T, -CO_2T, -OH, -(CH_2)_aSO_3T, -(CH_2)_aOSO_3T, -(CH_2)_aNHSO_3T, -(CH_2)_aCO_2(CH_2)_bSO_3T, -(CH_2)_aOCO(CH_2)_bSO_3T, -(CH_2)_aCONH(CH_2)_bSO_3T, -(CH_2)_aNHCONH(CH_2)_bSO_3T, -(CH_2)_aNHCONH(CH_2)_bSO_3T, -(CH_2)_aNHCONH(CH_2)_bSO_3T, -(CH_2)_aOCONH(CH_2)_bSO_3T, -(CH_2)_aPO_3HT, -(CH_2)_aPO_3HT, -(CH_2)_aPO_3HT, -(CH_2)_aCO_2(CH_2)_bPO_3T_2, -(CH_2)_aNHPO_3HT, -(CH_2)_aNHPO_3T_2, -(CH_2)_aCO_2(CH_2)_bPO_3T_2, -(CH_2)_aCO(CH_2)_bPO_3HT, -(CH_2)_aCONH(CH_2)_bPO_3T_2, -(CH_2)_aNHCO(CH_2)_bPO_3HT, -(CH_2)_aNHCONH(CH_2)_bPO_3HT, -(CH_2)_aNHCONH(CH_2)_bPO_3HT, -(CH_2)_aNHCONH(CH_2)_bPO_3HT, -(CH_2)_aNHCONH(CH_2)_bPO_3HT, -(CH_2)_aNHCONH(CH_2)_bPO_3HT, -(CH_2)_aNHCONH(CH_2)_bPO_3T_2, -(CH_2)_aNHCONH(CH_2)_bPO_3T_2, -(CH_2)_aNHCONH(CH_2)_bPO_3T_2, -(CH_2)_aCONH(CH_2)_bPO_3HT, -(CH_2)_aCONH(CH_$ 

 $Y_1 \text{ is selected from the group consisting of hydrophilic peptides, arylpolysulfonates,} \\ -(CH_2)_aOSO_3T, -(CH_2)_aNHSO_3T, -(CH_2)_aCO_2(CH_2)_bSO_3T, -(CH_2)_aOCO(CH_2)_bSO_3T, \\ -(CH_2)_aCONH(CH_2)_bSO_3T, -(CH_2)_aNHCO(CH_2)_bSO_3T, -(CH_2)_aNHCONH(CH_2)_bSO_3T, \\ -(CH_2)_aNHCSNH(CH_2)_bSO_3T, -(CH_2)_aOCONH(CH_2)_bSO_3T, -(CH_2)_aPO_3HT, -(CH_2)_aPO_3HT, -(CH_2)_aOPO_3HT, -(CH_2)_aOPO_3HT, -(CH_2)_aNHPO_3HT, -(CH_2)_aNHPO_3T_2, -(CH_2)_aCO_2(CH_2)_bPO_3HT, \\ -(CH_2)_aCO_2(CH_2)_bPO_3T_2, -(CH_2)_aOCO(CH_2)_bPO_3HT, -(CH_2)_aOCO(CH_2)_bPO_3HT, \\ -(CH_2)_aCONH(CH_2)_bPO_3HT, -(CH_2)_aCONH(CH_2)_bPO_3T_2, -(CH_2)_aNHCO(CH_2)_bPO_3HT, \\ -(CH_2)_aCONH(CH_2)_bPO_3HT, -(CH_2)_aCONH(CH_2)_bPO_3HT, \\ -(CH_2)_aCONH(CH_2)_bPO_3HT, \\$ 

 $-(CH_2)_aNHCO(CH_2)_bPO_3T_2, -(CH_2)_aNHCONH(CH_2)_bPO_3HT, -(CH_2)_aNHCONH(CH_2)_bPO_3T_2, \\ -(CH_2)_aNHCSNH(CH_2)_bPO_3HT, -(CH_2)_aNHCSNH(CH_2)_bPO_3T_2, -(CH_2)_aOCONH(CH_2)_bPO_3HT, \\ -(CH_2)_aOCONH(CH_2)_bPO_3T_2; \\$ 

W<sub>1</sub> is -CR<sub>c</sub>R<sub>d</sub>;

a, b, d, f, h, i, and j independently vary from 1-10;

c, e, g, and k independently vary from 1-100;

 $R_a$ ,  $R_b$ ,  $R_c$ , and  $R_d$  are defined in the same manner as  $Y_1$ ; and T is either H or a negative charge.

## 2-16 (CANCELED)

17. (PREVIOUSLY PRESENTED) The compound of claim 1 wherein R<sub>3</sub> is C<sub>1</sub> alkyl.

## 18. (CANCELED)

19. (PREVIOUSLY PRESENTED) The compound of claim 17 wherein each of  $R_4$  to  $R_7$  is independently -H or -SO<sub>3</sub>T.

20-22. (CANCELED)

23. (PREVIOUSLY PRESENTED) The compound of claim 1 wherein each of  $R_4$  to  $R_7$  is independently -H or -SO<sub>3</sub>T.

24-26. (CANCELED)

27. (CURRENTLY AMENDED) A method for performing a diagnostic or therapeutic procedure which comprises

administering to an individual an effective amount of a compound of formula 1

$$R_{5}$$
 $R_{6}$ 
 $R_{7}$ 
 $R_{1}$ 
 $R_{3}$ 

# Formula 1

#### wherein

R<sub>3</sub> is C<sub>1</sub>-C<sub>10</sub> alkyl;

 $R_4 \text{ to } R_7 \text{ are independently selected from the group consisting of -H, C1-C10 alkoxyl, C1-C10 polyalkoxyalkyl, C1-C20 polyhydroxyalkyl, C5-C20 polyhydroxyaryl, saccharides, amino, cyano, nitro, halogen, hydrophilic peptides, arylpolysulfonates, C1-C10 alkyl, C1-C10 aryl, -SO<sub>3</sub>T, -CO<sub>2</sub>T, -OH, -(CH<sub>2</sub>)<sub>a</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>OSO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>NHSO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>CO<sub>2</sub>(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>CO(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>CONH(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>NHCO(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>OCONH(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>OCONH(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>OCONH(CH<sub>2</sub>)<sub>b</sub>SO<sub>3</sub>T, -(CH<sub>2</sub>)<sub>a</sub>NHPO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>OPO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>OPO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>OCO(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>OCO(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>CONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>OCO(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>CONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>HT, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>NHCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>OCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>OCONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>CONH(CH<sub>2</sub>)<sub>b</sub>PO<sub>3</sub>T<sub>2</sub>, -(CH<sub>2</sub>)<sub>a</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>)<sub>b</sub>CONH(CH<sub>2</sub>$ 

 $Y_1 \text{ is selected from the group consisting of hydrophilic peptides, arylpolysulfonates, } \underline{C1-C10 \text{ alkyl.}}, -(CH_2)_a OSO_3T, -(CH_2)_a NHSO_3T, -(CH_2)_a CO_2(CH_2)_b SO_3T, -(CH_2)_a OCO(CH_2)_b SO_3T, -(CH_2)_a CONH(CH_2)_b SO_3T, -(CH_2)_a NHCONH(CH_2)_b SO_3T, -(CH_2)_a NHCONH(CH_2)_b SO_3T, -(CH_2)_a NHCONH(CH_2)_b SO_3T, -(CH_2)_a PO_3HT, -(CH_2)_a PO_3HT, -(CH_2)_a PO_3HT, -(CH_2)_a OPO_3HT, -(CH_2)_a NHPO_3HT, -(CH_2)_a NHPO_3T_2, -(CH_2)_a CO_2(CH_2)_b PO_3HT, -(CH_2)_a CO_2(CH_2)_b PO_3T_2, -(CH_2)_a CO(CH_2)_b PO_3HT, -(CH_2)_a CO(CH_2)_b PO_3HT, -(CH_2)_a CONH(CH_2)_b PO_3HT, -(CH_2)_a NHCO(CH_2)_b PO_3HT, -(CH_2)_a NHCO(CH_2)_b PO_3T_2, -(CH_2)_a NHCONH(CH_2)_b PO_3T_2, -(CH_2)_a NHCONH(CH_2)_b PO_3T_2, -(CH_2)_a NHCONH(CH_2)_b PO_3T_2, -(CH_2)_a NHCONH(CH_2)_b PO_3HT, -(CH_2)_a OCONH(CH_2)_b PO_3$ 

W<sub>1</sub> is -CR<sub>c</sub>R<sub>d</sub>;

a, b, d, f, h, i, and j independently vary from 1-10; c, e, g, and k independently vary from 1-100;  $R_a$ ,  $R_b$ ,  $R_c$ , and  $R_d$  are defined in the same manner as  $Y_1$ ; and T is either H or a negative charge; and performing the diagnostic or therapeutic procedure.

## 28. (PREVIOUSLY PRESENTED) The method of claim 27 wherein

R<sub>3</sub> is C<sub>1</sub>-C<sub>10</sub> alkyl;

 $R_4$  to  $R_7$  are independently selected from the group consisting of C1-C5 alkoxyl, C1-C5 polyalkoxyalkyl, C1-C10 polyhydroxyalkyl, C5-C20 polyhydroxyaryl, mono- and disacharides, amino, nitro, hydrophilic peptides, arylpolysulfonates, C1-C10 aryl, -SO\_3T, -CO\_2T, -OH, -(CH\_2)\_aSO\_3T, -(CH\_2)\_aOSO\_3T, -(CH\_2)\_aNHSO\_3T, -(CH\_2)\_aCO\_2(CH\_2)\_bSO\_3T, -(CH\_2)\_aOCO(CH\_2)\_bSO\_3T, -CH\_2(CH\_2-O-CH\_2)\_c-CH\_2-OH, -(CH\_2)\_d-CO\_2T, -CH\_2-(CH\_2-O-CH\_2)\_e-CH\_2-CO\_2T, -(CH\_2)\_r-NH\_2, -CH\_2-(CH\_2-O-CH\_2)\_g-CH\_2-NH\_2, -(CH\_2)\_h-N(R\_a)-(CH\_2)\_i-CO\_2T, and -(CH\_2)\_j-N(R\_b)-CH\_2-(CH\_2-O-CH\_2)\_k-CH\_2-CO\_2T;

 $Y_1 \text{ is selected from the group consisting of hydrophilic peptides, arylpolysulfonates,} \\ -(CH_2)_aOSO_3T, -(CH_2)_aNHSO_3T, -(CH_2)_aCO_2(CH_2)_bSO_3T, -(CH_2)_aOCO(CH_2)_bSO_3T;}$ 

 $W_1$  is -CR<sub>c</sub>R<sub>d</sub>;

a, b, d, f, h, i, and j independently vary from 1-5;

c, e, g, and k independently vary from 1-20;

 $R_a$ ,  $R_b$ ,  $R_c$ , and  $R_d$  are defined in the same manner as  $Y_1$ ; and T is a negative charge.

- 29. (CURRENTLY AMENDED) The method of claim 27 wherein each  $R_4$ ,  $R_6$  and  $R_7$  is H,  $R_5$  is  $SO_3T$ ,  $Y_1$  is  $-(CH_2)_3SO_3T$ ;  $W_4$  is  $-C(CH_3)_2$ ; and T is a negative charge.
- 30. (CURRENTLY AMENDED) The method of claim 27 wherein the <u>diagnostic or therapeutic</u> procedure uses light of wavelength in the region of 350 nm -1300 nm.
- 31. (CURRENTLY AMENDED) The method of claim 27 wherein the <u>diagnostic or therapeutic</u> procedure comprises monitoring a blood clearance profile by fluorescence using light of wavelength in the region of 350 nm to 1300 nm.
- 32. (CURRENTLY AMENDED) The method of claim 27 wherein the <u>diagnostic or therapeutic</u> procedure comprises monitoring a blood clearance profile by absorption using light of wavelength in the region of 350 nm to 1300 nm

- 33. (CURRENTLY AMENDED) The method of claim 27 wherein the <u>diagnostic or therapeutic</u> procedure is for physiological function monitoring.
- 34. (CURRENTLY AMENDED) The method of claim 33 wherein the <u>diagnostic or therapeutic</u> procedure is for renal function monitoring.
- 35. (CURRENTLY AMENDED) The method of claim 33 wherein the <u>diagnostic or therapeutic</u> procedure is for cardiac function monitoring.
- 36. (CURRENTLY AMENDED) The method of claim 33 wherein the <u>diagnostic or therapeutic</u> procedure is for determining organ perfusion in vivo.